IN THE UNITED STATES PATENT AND TRADEMARK OFFICE Re: Appeal to the Board of Patent Appeals and Interferences

| Appellants: Hada et al.) | | | Examiner: Kenneth Rinehart | | | |
|--|-------------|--|--|--------|---------------|--|
| Serial No: 10/662,139) | | | Group Art Unit: 3749 | | | |
| Filed: | Septe | mber 12, 2003 |)) Deposit Account No: 04-140 | 3 | | |
| Confirmation No: 9094 | | | Customer No: 22827 | | | |
| Γitle: | | m and Process for ghdrying Tissue Products |)) Attorney Docket No: KCX-66) | 62 (18 | 3776) | |
| NOTICE OF APPEAL: Pursuant to 37 CFR 41.31, Applicant hereby appeals to the Board of Appeals from the decision dated of the Examiner twice/finally rejecting claims | | | | | | |
| 2. | \boxtimes | BRIEF on appeal in this application pursuant to 37 CFR 41.37 is transmitted herewith (1 copy). | | | | |
| 3. | | An ORAL HEARING is respectfully requested under 37 CFR 41.47 (due within two months after Examiner's Answer). | | | | |
| 1. | | Reply Brief under 37 CFR 41.41(b) is transmitted herewith (1 copy). | | | | |
| 5. | | "Small entity" verified statemen | t filed: [] herewith [] previous | sly. | | |
| 3. | FEE (| CALCULATION: | | | Fees | |
| | | 1 above is X'd enter \$ 510.00 | | \$_ | 0.00 | |
| | | 2 above is X'd enter \$ 510.00 | | \$_ | <u>510.00</u> | |
| | | 3 above is X'd enter \$1,030.00 | | \$ | 0.00 | |
| | If box | 4 above is X-d enter –0- (no fee | 9) | \$_ | 0.00 | |
| PETITION is hereby made to extend the <u>original</u> due date of <u>October 6, 2007</u> , nereby made for an extension to cover the date this response is filed for which the requisite fee is enclosed (1 month \$120; 2 months \$460; 3 months \$1,050; 4 months \$1,640, 5 months \$2,230 \$ | | | | | | |
| | | , c . c | SUBTOTAL: | | 970.00 | |
| _ess | \$_ | 0.00 | | | | |
| f "om | all antis | tu" varified statement filed 🗆 pr | SUBTOTAL: | \$_ | 970.00 | |
| f "small entity" verified statement filed ☐ previously, ☐ herewith, enter one-half (½) of subtotal and <u>subtract</u> - | | | | | .00 | |
| | | | TOTAL FEE ENCLOSED: | \$ | 970.00 | |

| | Fee enclosed. | | | | | |
|--|---|--|--|--|--|--|
| | Charge fee to our Deposit Account/Order Nos. in the heading hereof (for which purpose one additional copy of this sheet is attached) | | | | | |
| \boxtimes | Charge to credit card (attach Credit Card Payment Form – PTO 2038) | | | | | |
| | Fee NOT required since paid in prior appeal in which the Board of Appeals did not render a decision on the merits. | | | | | |
| The Commissioner is hereby authorized to charge any fee specifically authorized hereafter, or any fees in addition to the fee(s) filed, or asserted to be filed, or which should have been filed herewith or concerning any paper filed hereafter, and which may be required under Rules 16-18 (deficiency only) now or hereafter relative to this application and the resulting official document under Rule 20, or credit any overpayment, to our Account No. shown in the heading hereof. This statement does not authorize charge of the issue fee in this case. | | | | | | |
| | DORITY & MANNING ATTORNEYS AT LAW, P.A. | | | | | |
| Post Gree Custo Telep | RESS: Office Box 1449 Priville, SC 29602 USA Omer ID No.: 22827 Othone: (864) 271-1592 Imile: (864) 233-7342 Date: November 30, 2007 | | | | | |
| I hereby certify that this correspondence and all attachments and any fee(s) are being electronically transmitted via the internet to the U.S. Patent and Trademark Office using the Electronic Patent Filing System on November 30, 2007 . | | | | | | |
| Sandra S. Perkins | | | | | | |
| (Typed or printed name of person transmitting documents) | | | | | | |
| Sand Stubs | | | | | | |
| (Sigr | (Signature of person transmitting documents) | | | | | |

ATTORNEY DOCKET NO: KCX-662 (19063)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| In re Application: Hada et al.) | Examiner: Kenneth Rinehart | | |
|----------------------------------|-----------------------------|--|--|
| Serial No: 10/662,139) | Art Unit: 3749 | | |
| Filed: September 12, 2003 | Confirmation No: 9094 | | |
| Title: System and Process For) | Deposit Account No: 04-1403 | | |
| Throughdrying Tissue Products) | Customer No: 22827 | | |

Honorable Commissioner for Patents U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

BRIEF ON APPEAL

Honorable Commissioner:

Appellants submit the following brief on appeal in accordance with 37 C.F.R. § 41.37:

1. REAL PARTY IN INTEREST

The real party in interest in this matter is the assignee of record, Kimberly-Clark Worldwide, Inc.

2. RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences known to the Appellants or the Appellants' legal representative which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

3. STATUS OF CLAIMS

Currently, claims 1-10 and 13-45 remain pending in the present application.

Claims 1-10, 13-33, and 45, including independent claims 1, 15, 28 and 45 were examined, and claims 34-44 are withdrawn pursuant to the restriction election filed on July 19, 2006. Independent claim 45 stands allowed. Dependent claims 10, 22, and 26 stand allowable if rewritten in independent form including all of the limitations of the base claim. All the pending claims are attached hereto in the Claims Appendix.

In the Final Office Action of February 6, 2007 and in the Advisory Action of May 22, 2007, claims 1-9, 13-21, 23-25, and 27-33 were finally rejected under 35 U.S.C. §103(a).

The rejection of examined claims 1-9, 13-21, 23-25, and 27-33 is hereby appealed.

4. STATUS OF AMENDMENTS

To the Appellant's knowledge, all amendments have been entered into the record.

5. SUMMARY OF CLAIMED SUBJECT MATTER

In general, the present application is directed to, a system for through-air drying paper webs, namely tissue webs. Pg. 1, lines 27-28. According to the present application, the web to be dried is conveyed along a transfer fabric and transferred from

¹ Appellants note that claim 45 was omitted from the listing of pending claims in the Final Office Action, along with the status of the withdrawn claims 34-44. The Final Office Action indicated that claim 11 would be allowable if rewritten in independent form. However, in Appellants' Amendment filed prior to the Final Office Action, claim 11 was cancelled and new claim 45 was added which represents original claim 11 written in independent form.

² Examiner Rinehart indicated that claim 45 was in condition for allowance in a telephone communication subsequent to the Final Office Action.

subsequent to the Final Office Action.

In the Advisory Action of May 22, 2007, Examiner Rinehart removed the 35 U.S.C. § 112 rejection of claims 10, 22, and 26. The § 112 rejection was the only rejection of these claims.

the transfer fabric to a throughdrying fabric. Pg. 2, lines 8-9. A transfer roll may include a pressurized zone configured to emit a gaseous stream for facilitating transfer of the tissue web from the transfer fabric to the throughdrying fabric. Pg. 2, lines 11-13. A pressurized transfer roll typically requires less energy than a vacuum roll (prior art) further increasing the overall efficiency of the papermaking system. Pg. 2, lines 25-27. The throughdrying fabric is wrapped around a drying cylinder of a through-air dryer and can form an endless loop around the dryer. Pg. 2, lines 4-6. The transfer roll is positioned outside of the endless loop, and thus, the wrap around the drying cylinder may be increased. Pg. 2, lines 19-23. Since the drying capability of a throughdryer is proportional to the amount of wrap of the throughdrying fabric around the cylinder, an increase in wrap can significantly increase the throughput of the through-air dryer. Pg. 2, lines 23-25.

For example, independent claim 1 is directed to a system for through-air drying paper webs comprising a first fabric 20 for conveying a paper web 16. See, e.g., Figs. 1, 2, and 4 and pg. 5, lines 19-32. Additionally, the system comprises a through-air dryer 28 comprising a hood 30 surrounding a drying cylinder 26, the through-air dryer 28 being configured to convey a hot gaseous stream through a paper web 16 traveling over the drying cylinder 26. See, e.g., Figs. 1, 2, and 4 and pg. 5, line 29 – pg. 6, line 10. The system further comprises a throughdrying fabric 24 being wrapped around the drying cylinder 26 of the through-air dryer 28. See, e.g., Figs. 1, 2, and 4 and pg. 5, lines 29-31. The throughdrying fabric forms an endless loop. See, e.g., Figs. 1 and 2, and pg. 7, lines 11-18. Furthermore, the system comprises a transfer roll 50 positioned outside the endless loop of the throughdrying fabric 24. See, e.g., Figs. 1, 2, and 4 and

pg. 7, lines 11-18. The first fabric **20** and the throughdrying fabric **24** are wrapped around the transfer roll **50** in an overlapping relationship. See, e.g., Figs. 1, 2, and 4 and pg. 9, lines 9-15. The transfer roll **50** includes a pressurized zone **52** configured to emit a gaseous stream for facilitating transfer of a paper web **16** from the first fabric **20** to the throughdrying fabric **24**. See, e.g., Figs. 1, 2, and 4 and pg. 6, line 26 – pg. 11, line 2.

Claim 7 is dependent upon claim 1 and provides for a turning roll **51** located downstream of the transfer roll **50** along the through-air dryer **28**. See, e.g., Figs. 1 and 2, pg. 6, lines 13-16, and pg. 7, lines 19-25. The throughdrying fabric **24** is wrapped around the turning roll **51** as the fabric leaves the drying cylinder **26** of the through-air dryer **28**. See, e.g., Figs. 1 and 2, pg. 6, lines 13-16, and pg. 7, lines 19-25. The turning roll **51** in combination with the transfer roll **50** determines the amount the throughdrying fabric **24** is wrapped around the drying cylinder **26** of the through-air dryer **28**. See, e.g., Figs. 1 and 2, and pg. 7, lines 19-25.

Claim 8 is dependent upon claim 7 and provides for a second fabric **36** wrapped around the turning roll **51** in an overlapping relationship with the throughdrying fabric **24**. See, e.g., Figs. 1 and 2, and pg. 6, lines 13-20. The paper web **16** is fed in between the throughdrying fabric **24** and the second fabric **36** along the turning roll **51** and is transferred to the second fabric **36**. See, e.g., Figs. 1 and 2, pg. 6, lines 13-20.

Independent claim 15 is directed to a system for through-air drying paper webs comprising a through-air dryer 28. See, e.g., Figs. 1 and 2, pg. 5, line 29 – pg. 6, line 25. The through-air dryer 28 comprises a hood 30 surrounding a drying cylinder 26 and the through-air dryer 28 is configured to convey a hot gaseous stream through a paper

web 16 traveling over the drying cylinder 26. See, e.g., Figs. 1 and 2, pg. 5, line 29 pg. 6. line 6. Additionally, the system comprises a throughdrying fabric 24 that is wrapped around the drying cylinder 26 of the through-air dryer 28. See, e.g., Figs. 1 and 2, pg. 5, line 29 - pg. 6, line 6. The system further comprises a first transfer fabric 20 configured to convey a paper web 16 to the throughdrying fabric 24 wherein the first transfer fabric 20 converges with the throughdrying fabric 24 at a transfer point. See, e.g., Figs. 1, 2, and 4, pg. 6, lines 26-32, and pg. 7, lines 9-25. Furthermore, the system comprises a transfer roll 50 positioned at the transfer point. See, e.g., Figs. 1, 2, and 4, pg. 6, lines 26-32, and pg. 7, lines 9-25. The transfer fabric 20 and the throughdrying fabric 24 is wrapped around the transfer roll 50 in an overlapping relationship. See, e.g., Figs. 1, 2, and 4, pg. 2, lines 9-11. A paper web 16 is conveyed on the first transfer fabric 20, fed in between the first transfer fabric 20 and the throughdrying fabric 24, and then transferred to the throughdrying fabric 24 prior to being conveyed around the drying cylinder 26 of the through-air dryer 28. See, e.g., Figs. 1, 2, and 4, pg. 6, lines 26-32, and pg. 7, lines 9-25. The transfer roll **50** further includes a pressurized zone 52 configured to emit a gaseous stream that facilitates transfer of a paper web 16 from the first transfer fabric 20 to the throughdrying fabric 24. See, e.g., Figs. 1, 2, and 4, and pg. 6, lines 26-32.

Independent claim 28 is directed to a drying apparatus that comprises a drying cylinder **26**. See, e.g., Figs. 1, 2, and 4, and pg. 5, line 29 – pg. 6, line 10. The apparatus further comprises a drying fabric **24** wrapped around at least a portion of the drying cylinder **26**. See, e.g., Figs. 1, 2, and 4, pg. 5, line 29 – pg. 6, line 1, and pg. 6, lines 26-32. The throughdrying fabric **24** is in the shape of an endless belt with the

endless belt having an upstream end prior to the drying cylinder **26** and a downstream end after the drying cylinder **26**. See, e.g., Figs. 1 and 2, and pg. 7, lines 9-25. Additionally, the apparatus comprises a transfer roll **50** positioned at the upstream end of the drying fabric **24** and a turning roll **51** positioned at the downstream end of the drying fabric **24**. See, e.g., Figs. 1, 2, and 4, and pg. 7, lines 19-25. The transfer roll **50** and the turning roll **51** are positioned outside of the endless loop. See, e.g., Figs. 1, 2, and 4, and pg. 7, lines 19-25. The transfer roll **50** includes a pressurized zone **52** configured to emit a fluid stream for transferring a web **16** from a transfer fabric **20** to the drying fabric **24**. See, e.g., Figs. 1, 2, and 4, and pg. 6, lines 26-32.

6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

In the Final Office Action, claims 1-9, 13-21, 23-25, and 27-33, including independent claims 1, 15, and 28, were rejected under 35 U.S.C. § 103(a) in view of U.S. Patent No. 4,238,284 to <u>Huostila, et al.</u> (hereinafter "<u>Huostila, et al.</u>") in combination with U.S. Patent No. 3,891,500 to <u>Kankaanpää</u> (hereinafter "<u>Kankaanpää</u>").

7. ARGUMENT

Appellants respectfully submit that the presently pending claims are patentable over the cited references. As discussed above, all of the pending claims were rejected under 35 U.S.C. § 103 (a) in view of <u>Huostila</u>, et al. in combination with <u>Kankaanpää</u>.

I. Independent claims 1, 15, and 28, along with their respective dependent claims, are patentable over <u>Huostila, et al.</u> and Kankaanpää.

Huostila, et al. relates to a method for dewatering a tissue web. Title. As shown in Fig. 2, for instance, the apparatus disclosed in Huostila, et al. includes a pick-up felt **21** that carries a web **W** onto a flow through drying wire **31** at a roller **25**. Col. 3, lines

44-49. Roller **25** is equipped with a vacuum zone **25**α which creates a "suction zone" that assists in dewatering the web **W** and felt **21**. Col. 3, lines 63-66; Col. 4, lines 4-10.

Kankaanpää discloses a paper machine having a long transport wire for making tissue paper. Title. As shown in Figs. 1 and 3, for instance, the apparatus disclosed in Kankaanpää includes a principal transport wire 6 that carries a web 5 through a press defined by rolls 16 and 17 to a transfer roll 19. Col. 4, lines 4-20. The transfer roll 19 has a permeable mantle and an interior overpressure chamber 20. Col. 4, lines 20-22. The overpressure chamber 20 assists in forcing the web 5 to follow wire 6 and into the cylinder 21. Col. 4, lines 20-25.

As admitted by the Office Action, <u>Huostila, et al.</u> does not teach a transfer roll including a pressurized zone configured to emit a gaseous stream for facilitating transfer of a paper web from the first fabric to the throughdrying fabric. The Office Action combines the teachings of <u>Kankaanpää</u> stating it would have been obvious to modify <u>Huostila, et al.</u> "by including the transfer roll including a pressurized zone configured to emit a gaseous stream for facilitating transfer of a paper web." Final Office Action of February 6, 2007, Pg. 6, lines 20-22.

A. <u>Huostila, et al.</u> teaches away from a transfer roll which includes a pressurized zone configured to emit a gaseous stream.

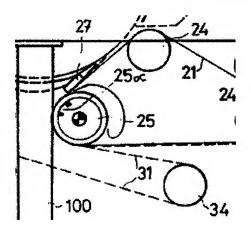
The Federal Circuit has several times expressly addressed the issue of how to evaluate an alleged case of prima facie obviousness to determine whether it has been properly made. For instance, "a prima facie case of obviousness can be rebutted if the applicant can show that the art in any material respect taught away from the claimed

invention." In re Haruna, 249 F.3d 1327,1335 (Fed. Cir. 2001), citing In re Geisler, 116 F.3d 1465, 1469 (Fed. Cir. 1997).

A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant. In re Gurley, 27 F.3d 551, 553 (Fed. Cir. 1994). Furthermore, a "prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention." M.P.E.P. 8th Ed., Rev. 6, §2141.02(VI), citing W.L. Gore & Associates v Garlock, Inc., 721 F.2d 1540 (Fed. Cir. 1983).

Independent claims 1, 15, and 28 each contain the limitation of a transfer roll wherein the transfer roll includes a pressurized zone configured to emit a gaseous stream for facilitating transfer of a paper web from a transfer fabric to a throughdrying fabric.

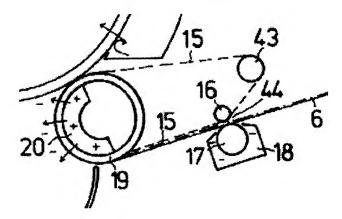
Huostila, et al. discloses a roller with a "suction zone" rather than a pressurized zone as claimed by Appellants. A portion of Fig. 2 of Huostila, et al. is provided below:



Huostila, et al. discloses that "web W traverses a relatively long run . . . to drawing roller **25**, which is equipped with a vacuum zone **25**α." Col. 3, lines 63-66. Furthermore,

"dewatering of web W occurs in suction zones 22α and 25α of pick-up roll 22 and drawing roller 25, respectively." Col. 4, lines 8-10.

<u>Kankaanpää</u>, on the other hand, discloses a transfer roll with an interior overpressure chamber. A portion of Fig. 1 of <u>Kankaanpää</u> is provided below:



Kankaanpää discloses that "the transfer roll **19** has a permeable mantle and an interior overpressure chamber **20**, which partly assists the drying of the web **5** and, particularly, forces the web **5** to follow along with the wire **6** after the separation of wires **6** and **15**." Col. 4, lines 20-25.

The Final Office Action stated that it would have been obvious to modify <u>Huostila</u>, et al. to include the transfer roll of <u>Kankaanpää</u>. However, as noted above, a prima facie case of obviousness is rebutted if any material respect of the prior art taught away from the invention. <u>In re Haruna</u> 249 F.3d at 1335 (citations omitted). <u>Huostila</u>, et al. teaches the use of a roller **25** that is equipped with a <u>vacuum zone</u>, which is the direct opposite of the transfer roller of <u>Kankaanpää</u> and the transfer roller claimed by Appellants that includes a pressurized zone configured to emit a gaseous stream.

Thus, from these express teachings, one of ordinary skill in the art would be led away

from substituting the transfer roll equipped with a vacuum zone of <u>Huostila</u>, et al. with a transfer roll that includes a pressurized zone configured to emit a gaseous stream.

B. The proposed modification of <u>Huostila</u>, et al. changes a principle of operation of the invention.

If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. <u>In re Ratti</u>, 270 F.2d 810, 123 USPQ 349 (CCPA 1959).

Huostila, et al. discloses:

It has been found that the use of a pick-up felt **21** in accordance with the present invention together with the relatively economic levels of suction results in the dry matter content of tissue web **W**, prior to its reaching flow through drying cylinder **20**, being in the range of 22 to 27%. . . . This drying level content is sufficiently high for economical processing of the web. Col. 4, lines 41-49.

Furthermore, <u>Huostila</u>, et al. discloses that "during its run on the pick-up felt **21**, water is removed from web **W** into felt **21** predominantly due to the capillary properties of the felt. . . Thus, dewatering of the web occurs during the web's travel on the pick-up felt **21**." Col. 3, line 68 – Col. 4, line 4. Additionally, "dewatering of web W occurs in suction zones **22**α and **25**α of pick-up roll **22** and drawing roller **25**, respectively." Col. 4, lines 8-10.

As such, replacing the "vacuum roller" of <u>Huostila</u>, et al. with a roller having a pressurized zone configured to emit a gaseous stream would not dewater the web on the drawing roller. In actuality, such a modification would destroy the principle of operation of both the pick-up felt **21** and the suction zone **25**α of drawing roller **25**. Replacing the vacuum roller with a roller having a pressurized zone configured to emit a

Appl. No. 10/662,139 Brief on Appeal dated Nov. 30, 2007

gaseous stream would cause water to transfer from the pick-up felt back into the web.

Such a result would be a direct contradiction of the overarching principle of Huostila, et al. Huostila, et al. states:

the method of the present invention is based on the fact that the felt material of the pick-up fabric absorbs by capillary action water from the web due to the capillary structure of the felt. This is in direct contradistinction to prior pick-up fabrics formed of wire from which water readily travels toward the web. Col. 2, lines 42-47.

Thus, the modification of <u>Huostila</u>, et al. as proposed in the Final Office Action destroys the principle of operation of the pick-up felt and the suction zone of the pick-up roller as well as directly contradicts the overarching principle of the entire invention. As such, a prima facie case of obviousness is not established.

In conclusion, Appellants request favorable action and allowance of the presently pending claims.

Respectfully requested,

DORITY & MANNING, P.A.

Ryan P. Harris

Registration No. 58,662

P.O. Box 1449

Greenville, SC 29602-1449 Phone: (864) 271-1592

Facsimile: (864) 233-7342

Date: 11/30/07

8. CLAIMS APPENDIX

(Rejected) A system for through-air drying paper webs comprising:
 a first fabric for conveying a paper web;

a through-air dryer comprising a hood surrounding a drying cylinder, the through-air dryer being configured to convey a hot gaseous stream through a paper web traveling over the drying cylinder;

a throughdrying fabric being wrapped around the drying cylinder of the through-air dryer, the throughdrying fabric forming an endless loop; and

a transfer roll positioned outside the endless loop of the throughdrying fabric, the first fabric and the throughdrying fabric being wrapped around the transfer roll in an overlapping relationship, the transfer roll including a pressurized zone configured to emit a gaseous stream for facilitating transfer of a paper web from the first fabric to the throughdrying fabric, adjacent to the transfer roll.

- 2. (Rejected) A system as defined in Claim 1, wherein the throughdrying fabric is wrapped around the drying cylinder at least 270°.
- 3. (Rejected) A system as defined in Claim 1, wherein the throughdrying fabric is wrapped around the drying cylinder at least 285°.
- 4. (Rejected) A system as defined in Claim 1, wherein the throughdrying fabric is wrapped around the drying cylinder at least 300°.
- 5. (Rejected) A system as defined in Claim 1, wherein the throughdrying fabric is wrapped around the drying cylinder at least 330°.
- 6. (Rejected) A system as defined in Claim 1, wherein the transfer roll comprises a rotatable roll.

- 7. (Rejected) A system as defined in Claim 1, further comprising a turning roll located downstream of the transfer roll along the through-air dryer, the throughdrying fabric being wrapped around the turning roll as the fabric leaves the drying cylinder of the through-air dryer, the turning roll in combination with the transfer roll determining the amount the throughdrying fabric is wrapped around the drying cylinder of the through-air dryer.
- 8. (Rejected) A system as defined in Claim 7, further comprising a second fabric wrapped around the turning roll in an overlapping relationship with the throughdrying fabric, wherein a paper web is conveyed through the through-air dryer by the throughdrying fabric, is fed in between the throughdrying fabric and the second fabric along the turning roll, and is then transferred to the second fabric.
- 9. (Rejected) A system as defined in Claim 7, wherein the turning roll is positioned outside the endless loop of the throughdrying fabric.
- 10. (Rejected) A system as defined in Claim 1, wherein the pressurized zone located on the transfer roll is configured to emit a gaseous stream at a pressure of from about 1 inch Hg to about 60 inches Hg.
 - 11. (Canceled)
 - 12. (Canceled)
- 13. (Rejected) A system as defined in Claim 1, wherein a paper web is only in contact with conveying fabrics when conveyed into and out of the through-air dryer.
- 14. (Rejected) A system as defined in Claim 1, wherein the pressurized zone has a length and wherein the throughdrying fabric is wrapped around the transfer roll so

traveling over the drying cylinder;

as to substantially cover the entire length of the pressurized zone, the throughdrying fabric separating from the first fabric at about an end of the pressurized zone.

15. (Rejected) A system for through-air drying paper webs comprising:

a through-air dryer comprising a hood surrounding a drying cylinder, the
through-air dryer being configured to convey a hot gaseous stream through a paper web

a throughdrying fabric being wrapped around the drying cylinder of the through-air dryer;

a first transfer fabric configured to convey a paper web to the throughdrying fabric, the first transfer fabric converging with the throughdrying fabric at a transfer point; and

a transfer roll positioned at the transfer point, the first transfer fabric and the throughdrying fabric being wrapped around the transfer roll in an overlapping relationship, and wherein a paper web is conveyed on the first transfer fabric, fed in between the first transfer fabric and the throughdrying fabric and then transferred to the throughdrying fabric prior to being conveyed around the drying cylinder of the throughair dryer, and wherein the transfer roll further includes a pressurized zone configured to emit a gaseous stream that facilitates transfer of a paper web from the first transfer fabric to the throughdrying fabric.

- 16. (Rejected) A system as defined in Claim 15, wherein the throughdrying fabric forms an endless loop, the transfer roll being positioned outside the endless loop.
- 17. (Rejected) A system as defined in Claim 15, wherein the throughdrying fabric is wrapped around the drying cylinder at least 270°.

- 18. (Rejected) A system as defined in Claim 15, wherein the throughdrying fabric is wrapped around the drying cylinder at least 300°.
- 19. (Rejected) A system as defined in Claim 15, wherein the throughdrying fabric is wrapped around the drying cylinder at least 330°.
- 20. (Rejected) A system as defined in Claim 15, further comprising a turning roll located downstream of the transfer roll along the through-air dryer, the throughdrying fabric being wrapped around the turning roll as the fabric leaves the drying cylinder of the through-air dryer, the turning roll in combination with the transfer roll determining the amount the throughdrying fabric is wrapped around the drying cylinder of the through-air dryer.
- 21. (Rejected) A system as defined in Claim 10, further comprising a second transfer fabric wrapped around a turning roll in an overlapping relationship with the throughdrying fabric, wherein a paper web is conveyed through the through-air dryer by the throughdrying fabric, is fed in between the throughdrying fabric and the second transfer fabric along the turning roll, and is then transferred to the second transfer fabric.
- 22. (Rejected) A system as defined in Claim 15, wherein the pressurized zone located on the transfer roll is configured to emit a gaseous stream at a pressure of about 4 inches Hg to about 25 inches of Hg.
- 23. (Rejected) A system as defined in Claim 15, wherein a paper web is only in contact with conveying fabrics when conveyed into and out of the through-air dryer.
- 24. (Rejected) A tissue making system incorporating the through-air dryer system of Claim 14.

- 25. (Rejected) A tissue making system as defined in Claim 24, comprising a head box configured to contain an aqueous suspension of papermaking fibers and for depositing the aqueous suspension onto a forming fabric.
- 26. (Rejected) A system as defined in Claim 15, wherein the throughdrying fabric is wrapped around the drying cylinder from about 270° to about 345°.
- 27. (Rejected) A system as defined in Claim 15, wherein the pressurized zone has an upstream end, a downstream end, and a length and wherein the throughdrying fabric is wrapped around the transfer roll over the entire length of the pressurized zone, the throughdrying fabric separating from the transfer fabric at about the downstream end of the pressurized zone.
 - (Rejected) A drying apparatus comprising:
 a drying cylinder;

a drying fabric wrapped around at least a portion of the drying cylinder, the throughdrying fabric being in the shape of an endless belt, the endless belt having an upstream end prior to the drying cylinder and a downstream end after the drying cylinder; and

a transfer roll positioned at the upstream end of the drying fabric and a turning roll positioned at the downstream end of the drying fabric, the transfer roll and the turning roll being positioned outside the endless loop, and wherein the transfer roll includes a pressurized zone configured to emit a fluid stream for transferring a web from a transfer fabric to the drying fabric.

- 29. (Rejected) An apparatus as defined in Claim 28, wherein the transfer roll and the turning roll are positioned such that the throughdrying fabric is wrapped at least 295° around the drying cylinder.
- 30. (Rejected) An apparatus as defined in Claim 29, wherein the transfer fabric is wrapped around the transfer roll in an overlapping relationship with the drying fabric, and wherein a paper web conveyed on the transfer fabric is fed in between the transfer fabric and the drying fabric along the transfer roll and then transferred to the drying fabric.
- 31. (Rejected) An apparatus as defined in Claim 30, wherein the transfer fabric is positioned adjacent to the transfer roll.
- 32. (Rejected) An apparatus as defined in Claim 28, wherein the drying apparatus comprises a through-air dryer.
- 33. (Rejected) An apparatus as defined in Claim 32, wherein the apparatus further comprises a hood surrounding the drying cylinder, the through-air dryer being configured to convey a hot gaseous stream through a paper web passing in between the hood and the drying cylinder.
- 34. (Withdrawn) A process for making a tissue web comprising:

 forming a wet tissue web by depositing aqueous suspension of
 papermaking fibers onto a forming fabric;

partially dewatering the wet tissue web;

conveying the tissue web from a transfer fabric to a throughdrying fabric, the tissue web being contacted by a fluid stream that pushes the web from the transfer

fabric to the throughdrying fabric as the web is being conveyed in between the two fabrics around a transfer roll;

drying the tissue web in a throughdryer as the web is conveyed on the throughdrying fabric, the throughdryer including a drying cylinder, the throughdrying fabric and the tissue web being wrapped around the drying cylinder at least 300°; and winding the dried web onto a parent roll.

- 35. (Withdrawn) A process as defined in Claim 34, wherein the throughdrying fabric and the tissue web are wrapped around the drying cylinder at least about 330°.
- 36. (Withdrawn) A process as defined in Claim 34, wherein the throughdrying fabric forms an endless loop around the drying cylinder, the transfer roll being positioned outside of the endless loop.
- 37. (Withdrawn) A process as defined in Claim 34, wherein after the wet tissue is deposited onto a forming fabric, the web only contacts fabrics until being wound into a parent roll.
- 38. (Withdrawn) A process as defined in Claim 34, wherein the wet tissue web does not contact any paper machine rolls during the process.
- 39. (Withdrawn) A process as defined in Claim 34, wherein the fluid stream that contacts the tissue web comprises a gaseous stream, the gaseous stream being at a pressure of from about 4 inches Hg to about 60 inches Hg.
- 40. (Withdrawn) A process as defined in Claim 34, wherein the dried web has a bulk of at least 6cc/g.
- 41. (Withdrawn) A process as defined in Claim 34, wherein the dried web has a basis weight of from about 6 gsm to about 80 gsm.

42. (Withdrawn) A process for increasing the drying capability of a through-air dryer, the through-air dryer comprising a hood surrounding a drying cylinder, the through-air dryer being configured to convey a hot gaseous stream through a paper web traveling in between the hood and the drying cylinder, a throughdrying fabric being wrapped around the drying cylinder for conveying a paper web over the drying cylinder, the through-drying fabric being placed adjacent to a vacuum device at an upstream end of the through-air dryer, the vacuum device for transferring a wet paper web from a transfer fabric to the through-drying fabric, the process comprising the steps of:

replacing the vacuum device with a positive pressure transfer roll, the transfer roll including a pressurized zone configured to emit a gaseous stream for facilitating transfer of a wet paper web from the transfer fabric to the throughdrying fabric; and

increasing a wrap angle of the throughdrying fabric around the drying cylinder by at least 10%.

- 43. (Withdrawn) The process as defined in Claim 42, wherein the wrap angle is at least 300°.
- 44. (Withdrawn) The process as defined in Claim 42, wherein the wrap angle is at least 330°.
 - 45. (Allowed) A system for through-air drying paper webs comprising: a first fabric for conveying a paper web;

a through-air dryer comprising a hood surrounding a drying cylinder, the through-air dryer being configured to convey a hot gaseous stream through a paper web traveling over the drying cylinder;

Appl. No. 10/662,139 Brief on Appeal dated Nov. 30, 2007

a throughdrying fabric being wrapped around the drying cylinder of the through-air dryer, the throughdrying fabric forming an endless loop; and

a transfer roll positioned outside the endless loop of the throughdrying fabric, the first fabric and the throughdrying fabric being wrapped around the transfer roll in an overlapping relationship, the transfer roll including a pressurized zone configured to emit a gaseous stream for facilitating transfer of a paper web from the first fabric to the throughdrying fabric, adjacent to the transfer roll, the pressurized zone located on the transfer roll being configured to emit the gaseous stream at a pressure of from about 4 inches Hg to about 60 inches Hg.

Appl. No. 10/662,139 Brief on Appeal dated Nov. 30, 2007

9. EVIDENCE APPENDIX

None

10. RELATED PROCEEDINGS APPENDIX

None